

1 What is claimed is:

2 1. A quick release coupling assembly structured to allow quick
3 connection and quick release, said coupling assembly comprising:

4 a first component and a second component cooperatively
5 structured to assume an attached orientation,

6 said first component comprising at least one locking member
7 movably mounted thereon,

8 said at least one locking member normally disposed in an
9 outwardly extending locking orientation,

10 an electromotive release mechanism structured such that
11 said first component and said second component are detached from
12 one another upon actuation of said electromotive release
13 mechanism,

14 said electromotive release mechanism disposed in an
15 operative association with said one locking member, and

16 said operative association being at least partially defined
17 by said electromotive release mechanism being structured to
18 normally dispose said locking member into said outwardly
19 extending locking orientation.

20 2. An assembly as recited in claim 1 wherein said at least one
21 locking member is at least temporarily disposable into a
22 retracted orientation.

23 3. An assembly as recited in claim 2 wherein said operative
24 association is further defined by said electromotive release
25 mechanism being structured to at least temporarily dispose said

1 at least one locking member into said retracted orientation upon
2 actuation.

3 4. An assembly as recited in claim 1 wherein said first
4 component comprises a plurality of locking members movably
5 mounted thereon, said electromotive release mechanism being
6 structured to normally dispose each of said plurality of locking
7 members into said outwardly extending locking orientation.

8 5. An assembly as recited in claim 4 wherein each of said
9 plurality of locking members is at least temporarily disposable
10 into a retracted orientation.

11 6. An assembly as recited in claim 5 wherein said
12 electromotive release mechanism is further structured to at
13 least temporarily dispose each of said plurality of locking
14 members into said retracted orientation upon actuation.

15 7. An assembly as recited in claim 1 wherein said
16 electromotive release mechanism comprises an actuation member,
17 said actuation member disposed in operative association with
18 said at least one locking member.

19 8. An assembly as recited in claim 7 wherein said actuation
20 member comprises a distal portion structured to facilitate
21 disposition of said locking member between said outwardly
22 extending locking orientation and said retracted orientation.

23 9. An assembly as recited in claim 8 wherein said distal
24 portion comprises a magnetically charged material.

25 10. An assembly as recited in claim 8 wherein said distal

1 portion comprises a propulsion member.

2 11. An assembly as recited in claim 1 wherein said
3 electromotive release mechanism comprises a shape memory alloy
4 component.

5 12. An assembly as recited in claim 1 wherein said
6 electromotive release mechanism comprises a solenoid.

7 13. An assembly as recited in claim 12 wherein said
8 electromotive release mechanism comprises a rotary solenoid.

9 14. An assembly as recited in claim 1 wherein said
10 electromotive release mechanism comprises a transformer.

11 15. An assembly as recited in claim 1 wherein said
12 electromotive release mechanism comprises an electric motor.

13 16. An assembly as recited in claim 1 further comprising a
14 voice activated control module structured to actuate said
15 electromotive release mechanism upon delivery of a verbal
16 command from a user to said voice activated control module.

17 17. An assembly as recited in claim 16 wherein said operative
18 association is further defined by said electromotive release
19 mechanism structured to at least temporarily dispose said at
20 least one locking member into said retracted orientation upon
21 actuation via said voice activated control module.

22 18. An assembly as recited in claim 1 further comprising a
23 manual release mechanism structured to permit manual actuation
24 of said electromotive release mechanism.

25 19. A quick release coupling assembly structured to allow quick

1 connection and quick release, said coupling assembly comprising:

2 a first component and a second component cooperatively
3 structured to assume an attached orientation when disposed in a
4 predetermined aligned engagement with one another,

5 said first component comprising at least one locking member
6 movably mounted thereon,

7 said at least one locking member normally disposed in an
8 outwardly extending locking orientation,

9 a release structure interconnected to said first component
10 and structured such that said first component and said second
11 component are detached from one another upon disposition of said
12 release structure into a disconnect position, and

13 an electromotive propulsion mechanism structured to at
14 least temporarily impart a separation force between said first
15 component and said second component.

16 20. An assembly as recited in claim 19 wherein said
17 electromotive propulsion mechanism is further structured to at
18 least temporarily impart an attraction force between said first
19 and said second components when said components are disposed in
20 said predetermined aligned engagement with one another.

21 21. An assembly as recited in claim 19 wherein said
22 electromotive propulsion mechanism comprises at least one
23 propulsion member disposed at a propulsion interface of said
24 first and second components, said propulsion member structured
25 to impart said separation force substantially normal to said

propulsion interface.

22. An assembly as recited in claim 21 wherein said propulsion member is disposable between a secured configuration and a separated configuration.

23. An assembly as recited in claim 21 where said secured configuration is at least partially defined by said propulsion member disposed in an inwardly retracted position.

24. An assembly as recited in claim 21 wherein said separated configuration is at least partially defined by said propulsion member disposed in an outwardly extended position.

25. An assembly as recited in claim 19 wherein said electromotive propulsion mechanism comprises a plurality of propulsion members disposed at a propulsion interface of said first and second components, each of said propulsion members being structured to impart said separation force substantially normal to said propulsion interface.

26. An assembly as recited in claim 25 wherein each of said propulsion members is disposable between a secured configuration and a separated configuration.

27. An assembly as recited in claim 21 further comprising a sequence control module structured to communicatively associate with said electromotive propulsion mechanism, said sequence control module further structured to control a sequence of positioning of said at least one locking member and said at least one propulsion member.

1 28. An assembly as recited in claim 19 further comprising a
2 voice activated control module structured to dispose said
3 release structure into said disconnect position upon delivery of
4 a verbal command to said voice activated control module.

5 29. A retractable leash assembly structured to allow quick
6 connection and release of a plurality of animals therefrom, said
7 assembly comprising:

8 a plurality of leads each comprising a proximal end and an
9 oppositely disposed distal end,

10 a plurality of coupling assemblies each comprising a first
11 component, each said first component interconnected to a
12 different one of said plurality of leads at said distal end
13 thereof,

14 each of said plurality of coupling assemblies further
15 comprising a second component interconnected to a different one
16 of a plurality of attachment assemblies, each of said plurality
17 of attachment assemblies structured to engage a different one of
18 the plurality of animals,

19 a housing comprising an activation assembly, said housing
20 structured to allow at least a portion of each of said leads to
21 pass therethrough,

22 said activation assembly further comprising a drive
23 mechanism,

24 said proximal end of each of said plurality of leads
25 interconnected to at least a portion of said drive mechanism,

1 said drive mechanism structured to release said portion of
2 each of said leads from said housing, and

3 said drive mechanism further structured to retract said
4 portion of each of said leads into said housing.

5 30. An assembly as recited in claim 29 wherein said drive
6 mechanism is structured to simultaneously release said portion
7 of each of said leads from said housing in a uniform manner.

8 31. An assembly as recited in claim 29 wherein said drive
9 mechanism is structured to simultaneously retract said portion
10 of each of said leads into said housing in a uniform manner.

11 32. An assembly as recited in claim 29 wherein said drive
12 mechanism is structured to independently release said portion of
13 each of said leads from said housing.

14 33. An assembly as recited in claim 29 wherein said drive
15 mechanism is structured to independently retract said portion of
16 each of said leads into said housing.

17 34. An assembly as recited in claim 29 wherein said drive
18 mechanism further comprises a drive motor.

19 35. An assembly as recited in claim 34 wherein said activation
20 assembly further comprises a voice activated control module.

21 36. An assembly as recited in claim 35 wherein said voice
22 activated control module is disposed in a communicative
23 association with said drive motor.

24 37. An assembly as recited in claim 36 wherein said
25 communicative association is at least partially defined by said

1 drive motor operating to retract said portion of at least one of
2 said plurality of leads into said housing upon delivery of a
3 verbal command from a user to said voice activated control
4 module.

5 38. An assembly as recited in claim 37 wherein said
6 communicative association is further defined by said drive motor
7 operating to retract said portion of each of said plurality of
8 leads into said housing upon delivery of said verbal command
9 from a user to said voice activated control module.

10 39. An assembly as recited in claim 36 wherein said
11 communicative association is at least partially defined by said
12 drive motor operating to release said portion of at least one of
13 said plurality of leads from said housing upon delivery of a
14 verbal command from a user to said voice activated control
15 module.

16 40. An assembly as recited in claim 39 wherein said
17 communicative association is further defined by said drive motor
18 operating to release said portion of each of said plurality of
19 leads from said housing upon delivery of a verbal command from
20 a user to said voice activated control module.

21 41. An assembly as recited in claim 29 wherein said activation
22 assembly further comprises a rechargeable power supply.

23 42. An assembly as recited in claim 41 wherein said rechargeable
24 power supply comprises a rechargeable direct current battery
25 pack.

1 43. An assembly as recited in claim 41 wherein said housing
2 further comprises a recharge port structured to permit
3 interconnection of said rechargeable power supply to a power
4 source, thereby permitting recharge of the rechargeable power
5 supply.